

SCIENCE

And Technology Program



Theme Area: Environmental Resources

Program Area: Fisheries Applications

Project No.: ER00.02

Project Title: Fish Condition and Survivorship under Varying Holding Conditions

Principal Investigator: Cathy Karp

Abstract: We propose to begin studying the effects of holding on fish survival at the Tracy Fish Facility and in the Denver Tracy Laboratory Flumes. Fish are typically held in large collection tanks in mixed species assemblages (with river debris) for 8 to 24 hours before being trucked back to the Delta for release. During this time they are subject to injury from the tank walls and river debris, and attempted or successful predation. The effect of this “swirling” on long-term survival is unknown. We plan to use release-recapture techniques to determine level and type of fish injury under the current operating guidelines (i.e., 8-24 hours confinement). We will also evaluate survivorship after short periods of confinement and in size groupings (using fish sorters) to reduce stress from multi-species contact. This study will be conducted in cooperation with mid-Pacific (Ron Brockman and Herb Ng) and Tracy Fish Facility (Gary Jordan). We also will work with hydraulic engineers in Denver on the laboratory model.